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ARE RISK TAKERS MORE PERSUASIVE THAN CONSERVATIVES IN GROUP DISCUSSION.

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THIS STUDY INVESTIGATED WHETHER THE PHENOMENON OF SHIFTS TOWARD GREATER RISK TAKING FOLLOWING DISCUSSION OF RISK-RELATED MATERIALS CAN BE ATTRIBUTED TO GREATER GENERAL PERSUASIVENESS EXERTED BY RISK TAKERS THAN BY CONSERVATIVES. ITS PROCEDURE WAS TO DISCOVER WHETHER RISK TAKERS WOULD BE JUDGED MORE PERSUASIVE THAN CONSERVATIVES FOLLOWING DISCUSSION OF RISK-NEUTRAL MATERIALS. RISK TAKERS WERE JUDGED SLIGHTLY MORE PERSUASIVE THAN CONSERVATIVES IN THE CASE OF FEMALE DISCUSSION GROUPS, BUT NOT AT ALL IN THE CASE OF MALE GROUPS. OUR CONCLUSION WAS THAT THE RISKY-SHIFT PHENOMENON CANNOT BE ATTRIBUTED TO GREATER PERSUASIVENESS AS A GENERAL CHARACTERISTIC OF HIGH RISK TAKERS IN MALE GROUPS, WHILE THIS FACTOR CAN PLAY NO MORE THAN A SMALL ROLE IN FEMALE GROUPS. THIS PAPER WAS PRESENTED AT THE AMERICAN PSYCHOLOGICAL ASSOCIATION CONVENTION, WASHINGTON, D.C., SEFTEMBER 1967. (AUTHORS)

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Are Risk Takers More Persuasive than Conservatives

in Group Discussion? 1

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Abstract

This study investigated whether the phenomenon of shifts toward greater risk taking following discussion of risk-related materials can be attributed to greater general persuasiveness exerted by risk takers than by conservatives. Its procedure was to discover whether risk takers would be judged more persuasive than conservatives following discussion of risk-neutral materials. Risk takers were judged slightly more persuasive than conservatives in the case of female discussion groups, but not at all in the case of male groups. Our conclusion was that the risky-shift phenomenon cannot be attributed to greater persuasiveness as a general characteristic of high risk takers in male groups, while this factor can play no more than a small role in female groups.

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Introduction

A number of studies conducted by the authors and others in recent years (see Kogan and Wallach, 1967a) have demonstrated that group discussion of risky decisions results in the acceptance of greater risks than are accepted when the same persons arrive at their decisions on an individual basis. Among the major contending explanations for this phenomenon of a "risky shift" induced by group interaction is the hypothesis that some characteristic of members with initially stronger risk-taking dispositions permits them to exert greater general powers of persuasion over their peers in the course of discussion (Marquis, 1962; Collins and Guetzkow, 1964). The present experiment seeks to evaluate the tenability of this interpretation of the risky-shift effect.

In previous studies of randomly composed groups discussing riskrelevant issues, the subjects, following the completion of the group
meeting, ranked the group members (including themselves) in terms of
relative influence exerted on the course of the discussion (Wallach, Kogan,
and Bem, 1962; Wallach, Kogan, and Burt, 1965). In some of this work,
the groups were required to reach a consensus regarding the desired
risk level, while in other work, the groups discussed the risky situations
without a consensus requirement and the discussion was followed by the
opportunity to make new individual decisions. Under both conditions,
discussion eventuated in a risky shift for groups of either sex. Furthermore,



under both conditions and for groups of either sex, those members initially more inclined toward risk taking were judged to have exerted greater influence on the discussion process than those whose initial decisions had been more conservative.

The foregoing evidence obviously is consistent with interpreting the risky shift effect as due to greater general persuasiveness of high risk takers during the course of group discussion. This evidence is not definitive, however. Members with initially higher risk-taking levels may appear more influential, while in fact the group shifts toward enhanced risk taking for other reasons. Since the group as a whole ends up closer to the initial positions of the high risk takers, the latter may seem to be more persuasive without actually exerting greater influence. The observed positive relationship between a member's initial level of risk taking and the extent of influence attributed to him, therefore, remains ambiguous as far as the question of persuasiveness by high risk takers is concerned.

To resolve the foregoing ambiguity, the present study will employ discussion materials that are risk-irrelevant or risk-balanced. If risk takers are not characterized by greater general persuasiveness, then high risk takers should not be judged more persuasive than low risk takers in discussions of such risk-neutral material. If greater general persuasiveness does characterize risk takers, on the other hand, high risk takers should exert greater persuasiveness regardless of the specific content of the



discussion task, and hence should be judged more persuasive than low risk takers in discussions of risk-neutral material.

Method

General Procedure

Five-person groups, homogeneous as to sex, were composed of persons chosen to represent a diverse array of individual positions regarding the risk-conservatism dimension. Following initial private decisions regarding risk-neutral materials, discussions to consensus were held. When the discussions were over, group members ranked one another on various criteria relevant to perceived persuasiveness during the discussion period.

Subjects

The pool of subjects for the present investigation consisted of 214 male and 194 female Duke undergraduates. From this pool, 75 males and 75 females were selected to serve in the group-discussion portion of the study. For their participation subjects received remuneration at a standard hourly rate or experimentation credit in the introductory psychology course.

Initial Risk-Taking Assessment

Group-administered to the total pool of subjects as an index of risktaking dispositions was the Choice Dilemmas procedure, an instrument that requires the subject to make recommendations concerning risk levels to



be adopted in a variety of hypothetical situations. Each situation that is described contains a protagonist who must choose between two courses of action; one involving a payoff of higher value but lower probability of attainment (hence, high risk), and the other involving a payoff of lower value but higher probability of attainment (hence, low risk). For example, one of the twelve situations depicts an electrical engineer who is faced with the choice of staying in his present job at a modest, though adequate salary or of changing to another job offering a higher salary but no long term security. The subject, in the case of each situation, is asked to indicate the lowest probability of attainment for the higher-value payoff that he would require before recommending that the high-risk course of action be pursued. The available odds in each situation consist of chances of 1 in 10, 3 in 10, 5 in 10, 7 in 10, and 9 in 10 for attainment of the higher-value payoff, in addition to which the subject has the option of rejecting the higher-value payoff no matter how likely its attainment (scored as required odds of 10 in 10). The odds levels required by the subject are summed across the twelve situations, the possible range of scores thus extending from 12 (maximum risk taking) to 120 (maximum conservatism).

Risk-taking dispositions were assessed with the Choice Dilemmas procedure because that measure of risk taking had been used in our earlier demonstrations of correlations between initial individual risk



level and judged persuasiveness of group members after discussion-induced risky shifts (Wallach, et al. 1962; Wallach, et al. 1965). For a complete presentation of the Choice Dilemmas procedure, together with reliability and validity information concerning it, see Kogan and Wallach (1964).

Following the measure of risk taking, the Maudsley Personality

Inventory (Eysenck, 1956; Jensen, 1958) was group-administered to the

total pool of subjects. Previous research (Rim, 1964) has suggested

that social extraversion might mediate the relation between risk taking

and persuasiveness. To check on this possibility, scores on the Maudsley

Extraversion scale were obtained for all subjects.

Formation of Groups

The total pool of subjects was divided, within sex, as nearly as possible into equal fifths in terms of scores on the risk-taking measure. The empirical score distributions permitted the five sets for males to consist of 40, 45, 46, 43, and 40 subjects, and for females to consist of 42, 38, 37, 38, and 39 subjects, in each case running from most conservative to most risky set respectively. Each discussion group was composed of one person from each fifth of the risk-taking distribution for males or females, sampled at random within the fifth. Presence of a high degree of dispersion of a group's members in terms of their individual risk-taking levels thus was assured. By proceeding to construct



five-person groups in this manner, 15 groups of males and 15 groups of females were formed. Discussion groups met approximately one to six months after the administration of the initial instruments and with no apparent connection between the two events. There were no sex differences in means or standard deviations for risk-taking levels, both in the case of the total subject pools and also in the case of the subjects in the discussion groups. The Risk-Neutral Discussion Materials

Individual decisions. The procedure followed with the risk-neutral materials paralleled as closely as possible that used in our earlier experiments (e.g., Wallach, et al. 1962), except for the difference in the materials themselves. Individual decisions were made first, with group discussions to consensus occurring subsequently. When the five subjects scheduled for a group session had assembled, the male experimenter handed out a booklet called an "Opinion Questionnaire," and requested that they read the instructions and look over the first item.

The general instructions were as follows:

"On the following pages, you will find a series of life situations described. The central person in each situation is faced with a choice between two alternative courses of action. Reasons can be suggested in support of either alternative.

"For each situation on the following pages, you will be asked to indicate which alternative course of action you would recommend for adoption and how strongly you favor it.



"Read each situation carefully before giving your judgment. There are no right or wrong answers; we are interested in your opinions. Try to place yourself in the position of the person who is making the decision in each of the situations. There are twelve situations in all. Please do not omit any of them."

The first item follows in its entirety:

"(1) Judge E. is attempting to decide on the most appropriate disposition of the case of Johnny L., the 16 year old son of a well-liked businessman who has been a leader in the community. Johnny has been convicted of breaking and entering a local store along with an older boy. This is Johnny's first major offense but he has been in a great deal of trouble of a less serious nature. The Judge has only two options. He can send the boy to reform school for a year or he can put him on probation. The judge has repor s which suggest that Johnny may well continue following the example of some older boys with bad records if he is put on probation. Johnny has been seen with these boys for several years and over this period has seemed to become more and more closely involved with their activities. On the other hand, the only available reform school has a somewhat poor reputation partly because the administrators seem to be not as inclined as is desirable to work for the rehabilitation of the boys who are sent to the institution. Some of the inmates, rather than reforming, turn into consistent lawbreakers.



"Please put a check next to the ONE statement that best expresses
your opinion:
I strongly favor that Judge E. send Johnny to reform school for a year
I moderately favor that Judge E. send Johnny to reform school for a
year.
I slightly favor that Judge E. send Johnny to reform school for a year.
I slightly favor that Judge E. put Johnny on probation.
I moderately favor that Judge E. put Johnny on probation.
I strongly favor that Judge E. put Johnny on probation."

When the subjects finished looking over the first item, the experimenter emphasized that the 12 situations to be considered all are matters of opinion and that there is no time limit. After any questions were answered, the subjects proceeded to make individual decisions concerning all of the items. In each item six response alternatives were presented, ranging from strong endorsement of one of the two possible courses of action to strong endorsement of the other. The wording of the six alternatives followed the format that was shown for item 1--i.e., "strongly favor," "moderately favor," and "slightly favor" one option followed by "slightly favor," "moderately favor," and "strongly favor" the remaining option.

Items 2 through 12 were similar in kind to item 1, covering a wide range of content. ³ To describe these materials as "risk-neutral" is to propose that the two possible courses ci action available in each situation

do not differ in terms of risk taking. If one adopts a definition of risk taking that is sufficiently narrow to exclude ethical dilemmas, then some of the situations would be described as risk-irrelevant, others as containing balanced risks. On the other hand, if one adopts a maximally broad definition of risk taking, then all of the situations would be described as involving risk elements, but with the options available in any given situation balanced as to riskiness. An empirical check on the claim that the materials just presented are in fact risk-neutral will be considered later.

Group discussions. After individual decisions were completed and the booklets collected, the experimenter handed out new blank copies of the booklets and asked the subjects to arrange themselves comfortably for a forthcoming discussion. His instructions then continued:

"The questionnaire you now have in front of you is the same one which you just finished taking. You have taken it in order to familiarize yourself with all the situations, and to give you the chance to form an opinion on each one. What we are really interested in now is having the group discuss each situation in turn and arrive at a unanimous decision concerning it. You will recognize that a unanimous decision is different from a majority vote, by the way. Let me say a word about our purpose in having you carry out these discussions. We are trying to develop a set of case materials for a human relations course. Having you discuss each situation in the questionnaire and reach a unanimous decision concerning it will help us



to understand the properties of the various situations that we constructed. Please discuss each one until the group decision is reached, and then go on to the next. When the group reaches its decision, please mark it on the questionnaire so you have a record of the group's decisions. I am not going to participate in the discussion although I will be here to answer any procedural questions that may arise, and I may listen to part of the discussion although it is only the group's final decision we are interested in. OK? You are on your own."

Group discussion-to-consensus of the 12 situations then followed.

Persuasiveness Measures

After completion of the discussions, the questionnaires were collected. The experimenter then wrote the names of the group members on the blackboard, arranged in a diagram according to the seating locations.

He indicated that he would like to learn a little bit concerning the members' feelings about the discussion itself, and handed out sheets containing the following question for them to respond to privately: "Which member of the group would you say was most influential in the discussions? How would you rank the others? Include yourself." After all subjects completed their rankings for influence, the sheets were collected. Since this persuasiveness measure duplicated that which had been gathered by Wallach, et al. (1962) after group discussions of the Dilemmas of Choice items, it was administered first and kept on a separate sheet from other presumably equivalent



persuasiveness measures that were administered subsequently.

As a reliability check, two additional persuasiveness measures were employed. On a second sheet, the members were asked: "Who contributed the best ideas for solving the problems? Please rank the members in order. Include yourself." A final question about persuasiveness then followed: "Who did the most to guide the discussions and keep them moving effectively? Please rank the members in order. Include yourself."

In previous research (Wallach, et al. 1962), persuasiveness but not popularity was related to individual risk-taking level after discussion-induced risky shifts. To see whether a comparable differentiation would hold in the context of the present study, a popularity assessment was again obtained. After the last of the persuasiveness questions, there appeared this inquiry: "How well did you personally like each of the other members? Please rank all the other members in order, assigning a rank of 1 to the other member whom you liked best."

For each of the post-discussion judgmental measures, a person's score consisted of the sum of the ranks assigned to him by all group members. Self-rankings were included in this sum, except in the case of the popularity measure (where self-rankings would have been inappropriate). Smaller numbers on the post-discussion measures indicated greater persuasiveness or popularity.



Results and Discussion

Internal Analyses of Persuasiveness and Popularity Measures

An important first question concerns the psychometric properties of the persuasiveness measures. Did the members of a group apply them consistently, and did these measures share a common meaning? Kendall's coefficient of concordance, W (Siegel, 1956, pp. 229-238), was used as an index of the degree to which a group's members agreed on their ordering of one another in terms of a given criterion of judgment. Table 1 demonstrates that group members showed substantial agreement on each of the three persuasiveness measures -- relative exertion of influence, provision of best ideas, and provision of effective guidance within the group. In particular, we should note that the levels of concordance for the influence judgment--i.e., the persuasiveness index used in our earlier studies--were of comparable magnitude to those obtained in our earlier work where the Dilemmas of Choice risk-taking materials rather than the present risk-neutral materials were discussed by the groups. Popularity judgments, on the other hand, were not made with high agreement by a group's members. There seemed to be considerable agreement by a group's members, then, in their evaluation of one another for relative persuasiveness during the discussion, but not surprisingly, less agreement for judgments of personal liking.



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Insert Table 1 about here.

What, in turn, were the relationships among these measures of perceived group behavior? Table 2 presents the correlations between all pairs of the judgment variables. While all correlations were significant beyond the .01 level, those among the three persuasiveness indicators were considerably higher than those between popularity and any of the persuasiveness measures. The three persuasiveness measures thus appeared to possess essentially the same meaning for the subjects—a meaning differing from that of the popularity measure.

Insert Table 2 about here.

Evidence on the Risk-Neutral Discussion Materials

Before examining the obtained relationship between risk-taking level and persuasiveness we must satisfy ourselves that the discussion materials devised for the present experiment were in fact neutral with respect to risk. Correlations between risk-taking level and responses on the six-point choice scale were computed for each of the 12 items comprising the discussion materials. It will be recalled that the choice scale runs from strong endorsement of one alternative to strong endorsement of the



other. None of the 12 correlations reached the .05 level for the males, while only two of the 12 reached the .05 level for the females.

Regarding the effect of group discussion upon the choices, comparisons were made for each item between the mean initial choice of the members of each group and their consensus based on group discussion. These difference scores were then examined against a null base-line of zero shift by means of t-tests. For the male groups, the outcome of discussion for 10 of the 12 items reflected an averaging effect. Thus, only two items yielded a significant shift ($\underline{p} < .05$) as a result of discussion. Since high risk takers did not differ from low risk takers in initial choice on those two items, the obtained shifts could hardly be due to the risk-taking properties of the materials. For the female groups, an averaging effect characterized the outcome of discussion for 9 of the 12 items. Of the three items that yielded a shift significant at the .05 level, for only one of them did high risk takers differ from low risk takers regarding initial choice; the group shifted in the direction of the high risk takers on that item. In sum, the possible artifact of subtle risk differences in the discussion materials can be effectively dismissed as irrelevant in the present circumstances.

Persuasiveness and Risk-Taking Level

Given the preceding evidence on the nature of the persuasiveness measures and the discussion materials, we can proceed to determine



whether risk takers are judged to be more persuasive people as a function of discussing risk-neutral dilemmas. Table 3 indicates that risk taking and persuasiveness were unrelated for males but were marginally related for females. For all of the correlations, scattergrams were plotted and

Insert Table 3 about here.

indicated no curvilinear trends. All measures of persuasiveness—
influence, ideas, and guidance—were positively associated with risk-taking
level in the case of females, though it should be noted that the absolute
magnitude of the correlations was quite low. Popularity, on the other
hand, was completely unrelated to risk taking. Evidently, persuasiveness
in social situations functions in some small degree as a general attribute
of high risk takers in a sample of females. One can expect, therefore,
that groups of females discussing risk-relevant issues will gravitate toward
greater risk taking in part because of influence exerted by high risk
takers in their midst.

The evidence for the males, on the other hand, indicated that persuasiveness and risk taking were essentially independent of each other.

The correlations for all three measures of persuasiveness actually were in the reverse direction from that predicted on the basis of expecting risk takers to be more persuasive than conservatives. Popularity and risk



taking also were unrelated. The risky-shift phenomenon in male groups, therefore, does not derive in any degree from exertion of greater general persuasive power by high risk takers.

While it is still possible that risk takers are more persuasive than conservatives only in the discussion of matters of risk, the meaning of persuasiveness upon such an interpretation has to be extremely limited and may in fact be impossible to disentangle empirically from the hypothesis that risk is a cultural value. Our evidence indicates that persuasiveness as a general attribute, at any rate, does not characterize male risk takers.

Toward further specification of the relationship between the persuasiveness measures and risk-taking level, an individual's scores on the influence, ideas, and guidance questions were summed, thus yielding a single index of relative persuasiveness for each subject. Given the high interrelationships among the three measures of persuasiveness, such summing seemed justified. The sum score in question yielded an <u>r</u> of +.21 with risk-taking level for the 75 females and an <u>r</u> of -.13 with risk-taking level for the 75 males. The former correlation was significant beyond the .06 level (60 df, one-tailed test), while the latter was not significant and, if anything, linked persuasiveness with conservatism rather than with risk taking. Also computed was the correlation within each of the female groups between an individual's risk-taking level and her score for the guidance question-



which, we recall, was the persuasiveness measure showing the strongest correlation with risk-taking level for the female sample as a whole. Of the 15 correlations that result, only four were significant beyond the .05 level by a one-tailed test. While all four significant r's were in the expected direction, five of the eleven remaining r's were in the reverse direction. All in all, therefore, the relationship between persuasiveness and risk-taking level that emerges for the females is at best a weak one.

Effects of Extraversion

Though the association in females between initial risk-taking level and persuasiveness under risk-neutral conditions is not strong in absolute terms, the fact that the sexes differ in the direction of the observed relationships suggests that different psychological processes may play a role in male and female groups. A Recall that the Maudsley Extraversion scale had been administered to all subjects prior to the group sessions. For both males and females, extraversion was significantly correlated with greater persuasiveness (five of the six possible \underline{r} is were significant beyond the .01 level). On the other hand, there was a striking discrepancy between males and females in the magnitude of the risk taking-extraversion relationship. Female risk takers were more extraverted ($\underline{r} = -.30$, $\underline{p} < .01$), whereas no such relation was found for males ($\underline{r} = .03$). These findings help to clarify the meaning of the sex difference observed earlier regarding relationships between risk taking and persuasiveness. Common to both



introverts. Specific to females are the findings that risk takers were judged more persuasive than conservatives and were more extraverted than conservatives. One reason, therefore, why female risk takers were judged more persuasive than female conservatives may be the former's extraverted orientation.

Of course, serious consideration must be given to the possibility that extraversion is but one component of a more comprehensive personality syndrome, the latter exercising a causal influence upon the relationships observed in the study. We might note in this connection some earlier research by the authors (Kogan and Wallach, 1964, Chap. 7) demonstrating highly significant correlations in a college female sample between risk taking on the Choice Dilemmas procedure and measures of independence and self-sufficiency on self-report personality scales. No such relations were obtained for college males.

Our explanation of the foregoing sex difference stressed that independence and self-sufficiency in females ran counter to prevalent sex norms of female passivity and dependence, and hence constituted a type of "social risk taking." Such an orientation in women, it was argued, might well have implications for the choice of risky alternatives in a variety of decision making situations. Regrettably, data on social extraversion were not available in our earlier research. It does not



extraversion is a form of interpersonal assertiveness or sheer talkativeness in a group context. Such an inference is highly consistent with the evidence reviewed by Mann (1959) indicating consistent positive associations between extraversion, on the one hand, and leadership and activity rate in small groups, on the other. Thus, the kinds of considerations proposed to account for the risk-taking implications of independence and self-sufficiency in females may well hold for extraversion as well. For males, in contrast, social assertiveness as such is not fraught with risk-taking implications because passive-dependent modes of behavior do not constitute a relevant ideal standard. Hence, males' judgments of persuasiveness may be more attuned to the cognitive content of arguments, whereas females' persuasiveness judgments may be more likely to reflect an affective response to the forcefulness with which arguments are advanced.

Conclusions

The results of the present study indicate that persuasiveness as a general characteristic of high risk takers cannot explain the risky-shift phenomenon for male groups, and can do so to only a small degree for female groups. In the case of females, the risky-shift effect can in some slight degree be attributed to the greater general persuasiveness of female risk takers than of female conservatives. This greater general



persuasiveness of female risk takers in turn seems to derive from a constellation of normative and personality characteristics in which social extraversion-introversion plays an important role. The effect in the case of males, on the other hand, cannot at all be explained on the basis of the general persuasive power of high risk takers. The exclusion of a particular interpretation does not imply, of course, that we have been able to provide evidence for or against other contending explanations of the risky-shift phenomenon. Positive evidence can presently be found in support of three alternative conceptualizations -- risk as a social value in conjunction with information exchange in the group (Brown, 1965; Teger and Pruitt, 1967); enhanced familiarization with the risk-taking instrument (Bateson, 1966; Flanders and Thistlethwaite, 1967); and responsibility diffusion (Kogan and Wallach, 1967b; Wallach, Kogan, and Burt, 1967). In addition, there still remains the logical possibility that risk takers may be more persuasive but only on matters of risk. The present experiment makes clear, however, that the hypothesis of greater persuasiveness as a general attribute of high risk takers can be effectively eliminated for males and can play no more than a minor role for females in accounting for the risky-shift phenomenon.

References

- Bateson, N. Familiarization, group discussion, and risk taking. <u>Journal</u> of Experimental Social Psychology, 1966, 2, 119-129.
- Brown, R. Social psychology. New York: Free Press, 1965.
- Collins, B. E., and Guetzkow, H. A social psychology of group processes for decision-making. New York: Wiley, 1964.
- Eysenck, H. J. The inheritance of extraversion-introversion. Acta Psychologica, 1956, 12, 95-110.
- Flanders, J. P., and Thistlethwaite, D. L. Effects of familiarization and group discussion upon risk taking. <u>Journal of Personality and Social Psychology</u>, 1967, 5, 91-97.
- Jensen, A. R. The Maudsley personality inventory. Acta Psychologica, 1958, 14, 314-325.
- Kogan, N., and Wallach, M. A. Risk taking: A study in cognition and personality. New York: Holt, Rinehart and Winston, 1964.
- Kogan, N., and Wallach, M. A. Modification of a judgmental style through group interaction. <u>Journal of Personality and Social Psychology</u>, 1966, 4, 165-174.
- Kogan, N., and Wallach, M. A. Risk taking as a function of the situation, the person, and the group. In New directions in psychology III.

 New York: Holt, Rinehart and Winston, 1967. Pp. 111-278. (a)

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- Kogan, N., and Wallach, M. A. Group risk taking as a function of members' anxiety and defensiveness levels. <u>Journal of Personality</u>, 1967, <u>35</u>, 50-63. (b)
- Mann, R. D. A review of the relationships between personality and performance in small groups. Psychological Bulletin, 1959, 56, 241-270.
- Marquis, D. G. Individual responsibility and group decisions involving risk. Industrial Management Review, 1962, 3, 8-23.
- Rim, Y. Personality and group decisions involving risk. <u>Psychological</u>
 Record, 1964, 14, 37-45.
- Siegel, S. Nonparametric statistics for the behavioral sciences. New York:

 McGraw-Hill, 1956.
- Teger, A. I., and Pruitt, D. G. Components of group risk taking.

 Journal of Experimental Social Psychology, 1967, 3, 189-205.
- Wallach, M. A., Kogan, N., and Bem, D. J. Group influence on individual risk taking. <u>Journal of Abnormal and Social Psychology</u>, 1962, 65, 75-86.
- Wallach, M. A., Kogan, N., and Burt, R. B. Can group members recognize the effects of group discussion upon risk taking? <u>Journal</u> of Experimental Social Psychology, 1965, 1, 379-395.
- Wallach, M. A., Kogan, N., and Burt, R. B. Group risk taking and field dependence-independence of group members. Sociometry, 1967, 30, in press.

Footnotes

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 2. Affiliated with the Ecole Pratique des Hautes Etudes, Sorbonne, during 1966-67.
- 3. The complete instrument is available upon request.
- 4. One possible explanation of the sex difference is a differential association between extremity and risk taking in males and females. Perhaps female risk takers were more extreme in their choices than female conservatives, the former appearing more influential because group discussion results in an extremity increase. To evaluate this possibility, the six-point choice scale for each item was folded over into a three-point extremity scale ranging from "slightly favor" to "strongly favor" regardless of the alternative endorsed. Extremity was unrelated to level of risk taking for either sex. Furthermore, extremity was significantly reduced rather than increased as a function of group discussion, thus replicating an analogous finding by Kogan and Wallach (1966). Extremity effects hence cannot account for the observed sex difference.

Table 1

Concordance Levels for Perceived

Group Behavior

	Males $(\underline{N} = 15 \text{ Groups})$		Females $(\underline{N} = 15 \text{ Groups})$	
	Mean <u>W</u>	No. of sig. W's	Mean <u>W</u>	No. of sig. W's
Influence	.60	12	. 59	12
Ideas	, 53	9	. 43	7
Guidance	. 59	11	.60	12
Popularity	. 32	3	. 37	1

Note. -- Mean W refers to the mean of the 15 W's for all groups of one sex. Number of significant W's refers to the number of W's significant beyond the .05 level (two-tailed) for all groups of one sex.

Table 2

Correlations between the Measures of Perceived Group Behavior

	Influence	Ideas	Guidance	Popularity	
Influence		. 87	.81	.44	
Ideas	. 89		. 83	.39	
Guidance	. 85	. 83		. 63	
Popularity	. 43	. 57	.41		

Note. --Correlations for males (N = 75) are above diagonal; correlations for females (N = 75) are below diagonal.

Table 3

Perceived Group Behavior as a Function of Risk-Taking Level

		Males (<u>N</u> = 75)	Females $(\underline{N} = 75)$
Influence			
	I	14	+. 19
	<u>P</u>	n.s.	<.08
Ideas			
	r	-, 13	+. 18
	<u>p</u>	n. S.	<.0 8
Guidance			
	r	or and the second	+. 22
	<u>P</u>	n. s.	<.05
Popularity	,		
	<u>r</u>	09	+.03
	<u>p</u>	n. s.	n. s.

Note. --One-tailed tests for influence, ideas, and guidance, since direction of any relationship for these variables was predicted. Larger scores indicate less persuasiveness, less popularity, and less risk taking. The <u>p</u> values shown are based on 60 degrees of freedom (the number of subjects less the number of groups).

